A comparison of heterosexual and homosexual mating preferences in personal advertisements

Running Headline: Heterosexual and non-heterosexual mate preferences

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Abstract

Human heterosexual mating preferences have been shown to conform to predictions drawn from evolutionary theory, with men and women adopting broadly distinct strategies. Attempts to reconcile sexual selection theory with homosexual behaviour have been less consistent, however, and have largely focussed on addressing two alternative perspectives: (i) that gay men and lesbians display phenotypic traits in common with opposite sex heterosexual individuals or (ii) that homosexual individuals display sex-typical, or exaggerated sex-typical phenotypes. Testing these hypotheses is complicated by sampling issues involved in the study of human sexual orientation, since obtaining standardised and comparable samples of heterosexual and non-heterosexual mating preferences is a prerequisite to analysis. Here we present a comparison of homosexual and heterosexual mating strategies in men and women using a sample of 1733 personal ('lonely hearts') adverts gathered from a single source. We used principal components analysis in order to expose underlying structure of the advertisements, and identify three components involving relative emphasis placed on resources, physical attractiveness and personality when offering or seeking mate characteristics. While homosexual individuals are shown to resemble their own-sex heterosexual counterparts in terms of emphasis placed on partner physical attractiveness relative to partner personality, no clear pattern emerges in other aspects of advertisement strategy. Nevertheless, there we find no evidence in support of the hypothesis that homosexual men and women are intrinsically opposite-sex typical in terms of mate preferences.

1. Introduction

Predictions concerning mate preferences in humans have often been drawn from evolutionary theory under the reasonable assumption that mating behaviour, being inextricably linked to reproductive success, will have undergone selection. Human mating strategy has been

shown to conform to predictions drawn from evolutionary theory, with men and women adopting broadly distinct strategies as displayed by their interest in casual sex and physical attractiveness (Buss 1991; Gangestad & Simpson 2000). Theories seeking to reconcile the persistence of same-sex sexual behaviour in humans have, in general, emphasised the possibility that there is an aspect of homosexuality (or bisexuality) that gives an advantage to direct or indirect fitness (Camperio-Ciani et al. 2004; Kirkpatrick 2000; McKnight 1997; Kirby 2003; Dewar 2003). Empirical testing of these ideas has, however, failed to provide unequivocal support for any particular hypothesis regarding the evolution of homosexual behaviour in humans(Rieger & Savin-Williams 2012; Kirkpatrick 2000).

Evolutionary studies of human mating preferences have identified several dimensions on which the preferences of heterosexual men and women differ (Buss 1989; Shackelford et al. 2005; Buss 1995). In a variety of cultures, heterosexual men have been shown to place a greater emphasis on physical attractiveness than heterosexual women, who tend to place greater emphasis on status and personality in a potential partner (Buss, 1989; Buss & Angleitner, 1989; Buss & Barnes, 1986; Koyama et al., 2004; Shackelford, Schmitt, & Buss, 2005). Heterosexual men have also been shown to prefer partners who are younger than them, and that the age difference between 'self' and ideal partner increases as a heterosexual man ages (Kenrick & Keefe 2011). In contrast, heterosexual women have been shown to prefer slightly older partners, while the relative difference between own and partner age remains more stable as age increases (Kenrick & Keefe 2011; Kenrick et al. 1995). Heterosexual men also have a tendency to report more interest in and more experience of casual sex than heterosexual women, who report fewer numbers of sexual partners (Gangestad & Simpson 2000; Schmitt 2005), and heterosexual men have been demonstrated to seek a greater variety of short-term sexual partners (Schmitt 2003).

Attempts to reconcile sexual selection theory with homosexual behaviour have taken one of two broad theoretical positions; (i) that homosexual men and women display phenotypic traits in common with opposite sex heterosexual individuals, that they are opposite-sex typical; or (ii) that homosexual individuals display sex-typical, or exaggerated sex-typical phenotypes. The former position, based on observations that homosexual men and women tend to be more gender non-conforming than heterosexuals (Lippa 2008; Lippa 2002; Rieger et al. 2008; Bailey et al. 1994), is associated with an idea that the brains of homosexual women and men have been respectively masculinised and feminised (or, more accurately, not masculinised) as a feature of their individual development (Rahman & Wilson 2003; Rahman 2005; Lalumière et al. 2000; Blanchard et al. 2006). Studies investigating this hypothesis have reported that homosexual men and women are more similar to heterosexual opposite sex than own sex counterparts in a variety of domains; homosexual men have more feminine digit length ratios (Manning et al. 2007), homosexual adults report patterns typical of the opposite sex in childhood play (Rieger et al. 2008; Bailey & Zucker 1995), and homosexual individuals are more similar to opposite sex heterosexuals than to same sex heterosexuals in both preferences for body odours (Martins et al. 2005) and physiological response to pheromones (Savic et al. 2005).

The alternative hypothesis, that homosexual individuals are sex-typical or sex-exaggerated, implies that the suite of behaviours that make up a mating strategy are distinct from sexual preference. This position allows for the evolution of broad, sex-typical mating strategies as the result of regular differences in selection pressures experienced by the two sexes (Buss 1995) as they engage in sexual reproduction (which is by definition 'heterosexual'), while sexual attraction to a specific sex is the result of other, potentially biological, mechanisms which may or may not serve specific adaptive functions. In support, homosexual men and women have been shown to have similar partner age preferences as their heterosexual counterparts (Gobrogge et al. 2007; Kenrick et al. 1995). Both

Glassenberg et al. (2010) and Welling et al. (2013) report similarities in the face preferences of homo- and heterosexual identified men and women. Behaviourally, gay men have also been reported to be equally interested in casual sex as heterosexual men, but to have more casual sex partners (Bailey et al. 1994). Robinson & Manning (2000) reported that gay men have more masculine digit length ratios than heterosexual men (in stark contrast to (Manning et al. 2007)), while Bogaert & Hershberger (1999) concluded that homosexual men may be hypermasculine in terms of penis circumference and length. Nevertheless, the support for either hypothesis is far from unequivocal.

One possible explanation for the array of competing evidence for the two theoretical positions may stem from the methodological difficulties in obtaining a representative sample of non-heterosexual individuals. Random sampling often does not result in a large enough sample of homo- and bisexual individuals for meaningful comparison with a heterosexual group, while targeted sampling requires individuals to self-identify in order to be included. This may bias a sample towards a group who have 'come out' and who may not be representative of the homosexual population as a whole (Sandfort 1997; Sergeant et al. 2006). Furthermore, individuals engaged in lab-based experiments may not report their sexual orientation honestly owing to anxiety over openly declaring a homosexual or bisexual orientation (Gobrogge et al. 2007), and so be erroneously included in a heterosexual sample. The possibility that these individuals may subsequently report mating preferences that conform to cultural gender-role stereotypes (Alexander & Fisher 2003) makes this an important methodological issue, since this may exaggerate differences between homo- and heterosesxual subsamples. Attempts to recruit homosexual individuals from 'naturalistic' settings such as gay pride events or LGBTQ groups may be problematic not only because it is similarly unknown how representative such participants would be of a wider homosexual population (Sandfort 1997), but also because comparable heterosexual sources do not exist. Since experimental groups should differ

from each other on as few dimensions as possible, this form of sampling makes drawing meaningful comparisons difficult. A further problem in the quantitative study of homosexual behaviour is that decisions on what aspect of sexual orientation to measure (e.g. identity (Lippa 2002), sexual arousal, romantic attraction (Savin-Williams & Ream 2007), frequency of fantasy (Wichstrøm & Hegna 2003) or sexual experience (Fay et al. 1989)) and by which of a number of available metrics (e.g. Kinsey scales (Kinsey et al. 1948), Shively scales (Shively & De Cecco 1977), the Klein grid (Klein et al. 1985)), can have non-trivial effects on results (Savin-Williams 2009).

Personal advertisements (personal ads) in newspapers address a number of the problems inherent in collecting standardised and comparable samples of heterosexual and non-heterosexual mating preferences. First, they are a source of naturalistic data in that they have been written by real-world individuals for a specific, real-world purpose (Gobrogge et al. 2007). Second, individuals have self-identified voluntarily rather than as the result of a survey question or interview. Third, drawing a sample of homosexual and heterosexual personal ads from the same publication allows for control of a number of possible confounding variables, given that newspaper readerships tend to conform to specific demographic features, including socioeconomic status and political alignment (Schoenbach et al. 1999; Webber 1993). Homosexual readers of any given newspaper are likely to systematically differ from a heterosexual reader only in terms of their sexual orientation, thereby giving a high level of cross-sample validity. Fourth, given that personal ads are typically divided in to four categories reflective of sexual orientation (Men Seeking Men, Men Seeking Women, Women Seeking Women and Women Seeking Men) their use avoids the complex issue of classifying individuals as belonging to any particular sexual orientation using self-reported measures (Savin-Williams 2009); they represent descriptions of homosexual or heterosexual mating strategies rather than homosexual or heterosexual individuals.

Personal ads are useful for investigating mating preferences as they represent genuine 'real world' statements of likes and dislikes, designed by an individual with the specific aim of attracting potential mates (Waynforth and Dunbar, 1995). Well validated methods exist for the analysis of personal advertisements (Waynforth and Dunbar, 1995, Thiessen et al. 1993) and they have been deployed in a number of studies on the evolution of, heterosexual (Pawlowski and Dunbar, 1999, Wiederman 1993; Greenlees & McGrew 1994; Waynforth & Dunbar 1995; Bereczkei & Csanaky 1996; Bereczkei et al. 1997) and homosexual (Bailey et al. 1995;1997, Gobrogge et al. 2007, Hawkins, 1990 & Kenrick and Keefe, 1995, Russock 2011) mate preferences.

Here we examine the alternative hypotheses that homosexual individuals should be opposite-sex or same-sex typical in terms of their mate preferences drawing on a large sample of personal ads from a single publication in order control for possible confounding variables and avoid sources of bias. Through deploying a Principal Components Analysis to expose the underlying structure of the personal ads we focus on the relative importance placed on evolutionarily salient traits - resources, commitment, personality (emphasised as important partner traits by heterosexual women) and physical attractiveness (emphasised by heterosexual men) to rigorously contrast the mating preferences of heterosexual and homosexual males and females. The use of PCA as an analytical technique in this context is novel, and may reveal more about the underlying structure of the adverts than the traditional techniques used in other, similar studies.

2. Methods

2.1. Data collection

Data were gathered from the 'Soulmates' section of multiple 1998-1999 issues of the Guide, a weekly entertainments supplement to 'the Guardian', one of the United Kingdom's broadsheet newspapers. The readership of the Guardian is largely middle class, politically left wing and of moderate to high socio-economic status with an equal split between male and female readers (Guardian 2010). 'Soulmates' published 'lonely-hearts' advertisements that allowed individuals to produce brief personal statements describing themselves and the partner they are looking for. Advertisements were divided in to four categories; "Men seeking Men" (MSM), "Men Seeking Women" (MSW), "Women Seeking Men"(WSM) and "Women Seeking Women"(WSW). Since the "Men Seeking Women" and "Women Seeking Men" sections are inevitably longer than the others, only every third advert was included in analysis, whereas every advert in the 'Men Seeking Men' and 'Women Seeking Women' section was recorded.

2.2. Scoring personal ads

Personal adverts were initially sorted to remove any duplications (e.g. repeated advertisements in successive issues). Adverts were then coded according to Buss (1989) and Waynforth & Dunbar (1995) with each advert allocated 8 scores representing the frequency with which they referenced four key categories in connection with the advertiser (self descriptors; traits offered) and/or the partner sought (ideal other descriptors; traits sought). These categories relate to various standard aspects of attractiveness and attraction and were Physical Attractiveness (e.g. "good looking", "attractive", "Great body", "handsome", "svelte", "youthful", "rugged" etc), Resources (e.g. "professional", "solvent", "graduate", "homeowner" etc), Personality (e.g. "kind", "happy", "funny" , "witty", "creative", "witty" etc); and Commitment (e.g. "monogamous", "shared life", "lasting 1-2-

1", "soul mate"). This method of scoring has been validated by word content analysis (Thiessen, 1993). From a total sample of 2145, advertisements which did not contain both 'offering' and 'seeking' elements (n = 412) were excluded. The final sample therefore contained 1733 individuals, 672 of which were women (Table 1).

The number of traits in each category is not a direct measure of a mating strategy but the emphasis placed on different categories may be reflective of an underlying tactical structure. In order to explore this, and to control for the variation between categories in terms of total traits offered and sought, specific trait totals (e.g. total personality traits sought) were expressed as proportions of total traits offered or sought, as appropriate, by dividing them by the respective total. Descriptive statistics for these new variables are given in table 2.

Principal Components Analysis is a statistical technique for identifying structural patterns in a set of data. This technique reduces the number of variables to be analysed to represent the underlying structure of the advertisements as relates to the key trait categories. The components were used as dependent variables in the subsequent analyses in order to test the alternative hypotheses under investigation in this study.

3. Results

3.1. Principal Components Analysis

Due to the low proportion of total commitment-relevant traits (Table 2), the two commitment variables were excluded from subsequent analysis. The remaining 6 variables (proportions of attractiveness, personality and resources, sought and offered) were entered into a Principal

Components Analysis with Varimax rotation for reduction. Three components with eigenvalues >1 were extracted accounting for 84.15% of the variance. Inspection of the factor loadings (see Table 3) showed that component 1 loaded strongly and positively on Resources Offered and Resources Sought, representing a general interest in resources. Accordingly we name component 1 'Resources'. Component 2 displayed a strong, positive loading on attractiveness sought and a strong, negative loading on personality sought, representing an apparent trade-off between these two aspects (that is that individuals who place emphasis on attractiveness in their sought-for partner tend not to emphasise personality and vice versa). Accordingly we name this factor "Seeking: attractiveness vs personality". Component 3 represented the reciprocal of component 2, loading positively on Physical Attractiveness offered and negatively on Personality offered, and was thus named "Offering: Physical Attractiveness vs Personality". Individuals scoring positively on these latter two components would place greater emphasis on physical attractiveness than personality traits, while those scoring negatively would do the converse.

Factors were converted to variables using Anderson-Rubin extraction, which produces normally distributed, continuous variables (i.e. they have a whole-sample mean of 0.00 and a standard deviation of 1.00, Field, 2009). These three new variables represent structural components of the personal advertisements which were used as dependent variables to assess differences in overall strategy between men and women seeking partners of different sexes.

3.2. Multivariate analysis

Descriptive statistics for the three components in each of the four categories (MSM, MSW, WSM, WSW) are given in Table 4. The three components were entered as dependent variables into a 2x2 MANOVA with advertiser sex and sex-sought as independent variables. This revealed significant

main effects of advertiser sex $F_{3,1727} = 9.47$, $p<0.001$, and sex sought, $F_{3, 1727} = 4.20$, $p<0.01$ on the underlying structure of the advertisements. There was also a significant interaction between advertiser sex and sex-sought, $F_{3, 1727}= 5.93$, $p<0.01$. These effects were followed up with univariate tests, below.

3.2.1.Resources.

Neither sex of advertiser nor sex sought produced a significant main effect ($p > 0.05$ in both cases), but a significant interaction between sex of advertiser and sex sought was detected, $F_{1, 1729}=6.93$, $p<0.01$ (see Figure 1a.). Mean scores on this variable for MSW, WSM and MSM are all close to zero, suggesting a general tendency not to emphasise resources for these groups, whereas the positive mean score for WSW suggests a strong tendency to advertise and seek resources. This does not provide unequivocal support for either hypothesis since MSM are similar to their heterosexual same-sex *and* opposite-sex counterparts. WSW mention resource terms significantly more than WSM, and so are not sex-typical in this regard, but also differ significantly from MSW, and so are not opposite sex-typical either.

3.2.2.Seeking: Physical Attractiveness vs Personality

Analysis revealed a highly significant main effect of sex of advertiser for this component, $F_{1,1729} = 21.66$, $p<0.001$, but no main effect of sex sought ($p >0.05$), such that men scored more highly on this variable than women, irrespective of sex of target partner (see fig 1b), suggesting that

advertisements written by men contain a higher proportion of traits related to appearance than personality when describing an ideal partner while advertisements written by women display the opposite condition. There was no interaction between the variables ($p > 0.05$). These results support the hypothesis that homosexual men and women are sex-typical in their mating strategy, at least in terms of mate preferences.

3.2.3. Offering: Appearance vs Personality

Analysis revealed a highly significant main effect of sex sought, $F_{1, 1729} = 12.24$, $p < 0.001$, and a highly significant interaction effect between the two independent variables, $F_{1,1729} = 10.48$, $p < 0.01$, on the third component. There was no significant main effect of sex of advertiser ($p > 0.05$). Again, support for the two hypotheses is variable; WSW and MSW both emphasise personality over appearance, in support of hypothesis that individuals attracted to their own sex should be opposite-sex typical, while MSM and WSM differ from each other significantly, with MSM placing a greater emphasis on their appearance when describing themselves (see Fig 1c). In fact, MSM place a greater emphasis on their appearance in this context than any other group, all of which emphasise their personality.

4. Discussion

Personal advertisements provide standardised and comparable samples of heterosexual and non-heterosexual mating preferences allowing the assessment of the alternative hypotheses that homosexual individuals should be opposite-sex or same-sex typical in terms of their mate

311 preferences. The current study identified three dimensions underlying the content of personal
312 adverts; a general interest in resources and a trade-off between personality and appearance-related
313 traits in both self- and ideal-partner descriptions. In the latter we identify a sex difference in line
314 with other research in to human mating preferences (e.g. Buss 1989) that men tend to emphasise
315 appearance over personality in a potential mate, whereas women do the converse. This supports a
316 general hypothesis that the mating strategies of males and females have evolved in response to a
317 differing set of selective pressures, stemming from differences in obligatory parental investment
318 with men are more attentive to potential cues of fertility and fecundity in partners than women,
319 while women attend more to personality-traits (particularly dominance, creativity and prosociality)
320 in potential mates than men (Buss & Angleitner 1989; Buss 1995; Shackelford et al. 2005; Buss &
321 Barnes 1986; Hill et al., 2005). That we failed to detect any difference in this trait based on preferred
322 sex of mate may suggest that the selection pressures responsible for strategic differences between
323 men and women in the mating arena have been (and may still be) sufficiently powerful that the
324 resulting adaptation is common to homo- and heterosexual individuals despite the fact that it may
325 be fitness-enhancing only in the latter. The results here suggest that in terms of a trade-off between
326 physical attractiveness and personality as preferred partner-traits, homosexual individuals of either
327 sex are behaving in the same way as their heterosexual counterparts.
328
329 Women seeking women were shown to be unique in their advertisement of their own and their ideal
330 partner's resources. This result contrasts with that of Russock (2011) where women seeking men
331 differed from other groups in seeking resources significantly more often. According to the principles
332 of parental investment theory, females in a species where males invest in offspring should be
333 expected to emphasise resource control in mates, whereas males should be less interested in
334 resource control in mates (Gangestad & Simpson 2000; Shackelford et al. 2005). The tendency for
335 neither group of men to focus on resources is, therefore, in line with evolutionary theory, as is the
336 tendency for women seeking women to emphasise it. The lack of emphasis placed on resources in

the women seeking men is therefore unexpected. It is possible that the relative affluence of the Guardian's readership has caused women to place low emphasis on male resources given that they are likely to be financially independent (Moore & Cassidy 2007), although the fact that women seeking women place emphasis on partner's resources is not consistent with this explanation. As an alternative, it is possible that men do not respond positively to overt mentioning or seeking of resources (their own adverts are comparatively free of this component), and that women seeking men tend to avoid doing so as a consequence. Given the absence of men from their potential array of partners, women seeking women may be freed to signal an interest in resources without negative consequence: Women seeking women may have been released from the behavioural constraints imposed by men. This interpretation would imply that, in terms of evolved preferences, homosexual individuals are sex-typical in their responses but that heterosexual women have modified their responses in light of the preferences of men. Further work is needed to investigate this possibility.

For the one component relating entirely to self-description, the majority of groups emphasised their own personality at the cost of their own physical attractiveness. The only group for which this is not true are men seeking men, who place emphasis on the latter trait at the expense of the former. While this feature is in line with evidence that suggests the social arena of gay men is preoccupied with physical attractiveness (Ha et al. 2012), the fact that this group differs from the others is noteworthy. Evolutionary work on human mating strategy has tended to focus on what individuals want in a partner rather than what they should signal about themselves, although it seems logical to suggest that a successful strategy would be one which signals features preferred by the target sex. Advertisements of all but one group follow this pattern: The tendency for all individuals seeking women to emphasise their own personality may be explained by the tendency of women to emphasise this trait as desirable in a partner. Similarly, the tendency for men seeking men to advertise their own attractiveness may be due to the fact that men, on the whole, value this trait in

a partner (Russock 2011). It is not clear why women seeking men are the only group who do not match the preferences of their preferred sex when describing themselves, although it is important to remember that the results here reflect the trade-off between offering physical attractiveness vs personality. Only men seeking men offer a greater proportion of traits relating to physical attractiveness than women seeking men, a finding in line with previous analyses (Russock 2011). The trade-offs revealed through our PCA analysis suggest that traditional analyses based on proportions may obscure more complex interactions between the traits offered and sought in word-limited personal advertisements.

The study also underlines the importance of careful and appropriate sampling when undertaking studies of this kind, in order to avoid the inherent methodological problems that occur when one comparator population cannot be randomly sampled. Lonely hearts advertisements offer a valuable resource for future research, although our results differ from those of Russock (2011) in a number of facets, despite both drawing on large samples of adverts. However, Russock's (2011) sample was derived from nine print newspapers and 26 online sources; this variability in the readership, which include mainstream media and newspapers catering specifically to a gay clientele, may have introduced unintended biases to the sample. Drawing both heterosexual and non-heterosexual samples from the same source reduces to some extent the methodological issues associated with obtaining representative samples of non-heterosexuals for studies of this kind, most notably the random sampling of homo- and bisexual populations (Sandfort 1997; Sergeant et al. 2006). That said, the homogeneity of the Guardian’s readership in terms of education, political ideology and socioeconomic status may call in to question the generalizability of results obtained here. Future researchers will need to decide which weakness is most appropriate to tolerate in the context of their study.

In terms of the specific hypotheses, the tendency for all men and all women to behave in ways predicted by evolutionary theory in their respective tendencies to emphasise physical attractiveness over personality and vice versa gives some support for the same-sex typical hypothesis for homosexual behaviour. Men and women show identical mate preferences regardless of preferred partner sex. In contrast to Russock (2011), there is no unequivocal support for the opposite-sex typical hypothesis, since even when homosexual individuals cluster with their opposite sex, heterosexual counterparts (which men seeking men do on the first component, and women seeking women do on the third), they also cluster with same sex heterosexuals.

The results from the current study suggest that the mating strategy that informs the writing of personal ads is multifaceted, and that an observed sex difference in one facet, mate preferences, a) conforms to predictions drawn from sexual selection theory and b) is identical in men and women regardless of sex sought; that is, that homosexual mating strategy is sex-typical in this regard. Other facets of mating strategy, revealed by the novel use of PCA in this context, are more complex to interpret and provide limited support for either hypothesis. We suggest these may be reflective of influences of social learning on mating strategy, which is known to be flexible in humans (DeBruine et al. 2010; DeBruine et al. 2010; Brown et al. 2009). Crucially, there is no evidence here in support of the hypothesis that homosexual men and women are intrinsically opposite-sex typical in terms of mate preferences.

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528

529 Table 1. Frequencies for the four categories of advert in the final sample.

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	Seeking Men	**Seeking Women**	**Total**
Men	649	412	1061
Women	347	325	672
Total	996	737	1733

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535 Table 2. Mean proportion of total traits offered (top half) and total traits sought (bottom half)
536 represented by each trait category for each advert category (men seeking men (MSM), men seeking
537 women (MSW), women seeking men (WSM) and women seeking women (WSW)). Standard
538 deviations in brackets.

539

	Trait category	**MSM**	**MSW**	**WSM**	**WSW**
Traits offered	Physical attractiveness	0.32	0.26	0.29	0.24
		(0.25)	(0.24)	(0.23)	(0.28)
	Personality	0.31	0.41	0.39	0.37
		(0.26)	(0.27)	(0.26)	(0.31)
	Resources	0.36	0.33	0.31	0.38
		(0.26)	(0.25)	(0.24)	(0.29)
	Commitment	< 0.00	< 0.00	< 0.00	< 0.00
		(.03)	(0.49)	(0.01)	(0.06)
Traits sought	Physical attractiveness	0.31	0.31	0.18	0.23
		(0.35)	(0.36)	(0.27)	(0.32)
	Personality	0.44	0.47	0.55	0.51
		(0.38)	(0.38)	(0.36)	(0.38)
	Resources	0.21	0.18	0.25	0.23
		(0.28)	(0.28)	(0.30)	(0.30)
	Committment	0.04	0.03	0.02	0.02
		(0.17)	(0.14)	(0.14)	(0.12)

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543 Table 3. Component loadings after varimax rotation. Highest loadings for each component in bold.

544

	Component	1	2	3
	% Variance Explained	35.58	30.23	18.35
Traits offered	*Proportion resources*	**0.84**	-0.20	0.24
	Proportion personality	-0.41	-0.09	**-0.91**
	Proportion appearance	-0.42	0.30	**0.75**
Traits sought	*Proportion resources*	**0.77**	0.23	-0.13
	Proportion personality	-0.35	**-0.92**	-0.09
	Proportion appearance	-0.26	**0.82**	0.22

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548 Table 4. Means and standard deviations for each component in each advertisement category.

549

	Writers	Seeking	Mean	Std. Deviation
Interest in Resources (Component 1)	Women	Men	-0.04	0.89
		Women	0.12	1.10
	Men	Men	0.01	1.02
		Women	-0.09	0.96
Seeking: Physical attractiveness vs Personality (Component 2)	Women	Men	-0.16	0.93
		Women	-0.13	1.00
	Men	Men	0.09	1.00
		Women	0.09	1.02
Offering: Physical attractiveness vs Personality (Component 3)	Women	Men	-0.08	0.96
		Women	-0.09	1.10
	Men	Men	0.18	0.96
		Women	-0.15	0.97

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Figure 1. Estimated marginal means for each component across different writer sex and sex sought categories. a) Component 1: Resources. b) Component 2: Seeking physical attractiveness vs seeking personality. c) Component 3: Offering physical attractiveness vs offering personality). Error bars +/- 1 SE.